

- 30 -

# ABSTRACT

Methods, systems, and apparatus for use in a communication system utilizing multiple bands to improve transmission error rates are disclosed. Error rates are improved by mapping a portion of an input bit stream within a data stream to first and second bands of the multiple bands, transmitting the portion of this bit stream in the first and second bands, receiving bit streams in the first and second bands corresponding to the portion of the bit stream, demapping the first and second bands, and processing the first and second band bit streams to yield the original portion of the input bit stream.